

Glossary

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Allotment – An area of land where one or more livestock operators graze their livestock. Allotments generally consist of BLM lands but may also include other federally managed, state owned, and private lands. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

Anadromous Fish – Fish, such as salmon and steelhead, that hatch in fresh water, migrate to the ocean, mature there, and return to fresh water to reproduce.

Anthropogenic – Of, relating to, or resulting from the influence of human beings on nature.

Big Game – Large species of wildlife that are hunted, such as elk and deer.

Biological Assessment – The gathering and evaluation of information on proposed endangered and threatened species and critical habitat and proposed critical habitat. Required when a management action potentially conflicts with endangered or threatened species, the biological assessment is the way federal agencies enter into formal consultation with the Fish and Wildlife Service and describe a proposed action and the consequences to the species the action would affect.

Biological Legacies – Large trees, down logs, snags and other components of the forest stand left after harvesting for the purpose of maintaining site productivity and providing structures and ecological functions in subsequent stands.

Bull-line – The lining of logs from stump to road or landing using a winch line system on logging equipment operating from an existing road or landing. Typically logs would be adjacent (estimated 200') to the road or landing and would not be suspended off the ground.

Bureau Assessment Species – Plant and animal species on List 2 of the Oregon Natural Heritage Data Base, or those species on the Oregon List of Sensitive Wildlife Species, and are not included as federal candidate, state listed, or Bureau-sensitive species.

Bureau Sensitive Species – Plant or animal species eligible for federal listed, federal candidate, state listed, or state candidate (plant) status, or on List 1 in the Oregon Natural Heritage Data Base, or approved for this category by the State Director.

Burn Severity Levels –

High Severity – Nearly complete consumption of ground cover has occurred. The ash layer is 1 to 2 inches deep. Little char is recognizable below the surface. Complete consumption of tree crowns has occurred, few or no needles or leaves remain on trees, and complete or nearly complete mortality has taken place. Soil structural stability may be reduced due to consumption of soil organic matter. Fine and very fine roots may have been consumed in the surface few centimeters of soil. Water repellency is generally strong at the soil surface.

Moderate Severity – The shrub canopy is all or partially consumed and shrub skeletons and root crowns remain. Conifers retain grown needles and fine twigs. Some identifiable litter and leaf layer remains under the ash layer. Soil structure is generally intact, fine and very fine roots remain and water repellency may be significant.

Low Severity – Vegetation is lightly scorched and most large trees remain alive. Very small diameter fuels have been consumed. Forbs may be charred but regrowth should not be inhibited. Ample recognizable char is still evident in ash and char layers, as well as intact litter and duff. The amount of soil cover is not greatly reduced from the pre-fire amount. Soil structure is not altered; fine and very fine roots still exist in surface soil. The surface millimeter of soil may be weakly water repellent in places.

Unburned or Very Low Severity – Overstory canopy remains green and vigorous. Mortality of trees and shrubs is light. Vegetation mortality is minimal. Consumption of ground litter and duff is minimal.

Cable Logging – Logging that involves the transport of logs from stump to collection points by means of suspended steel cables. In this document, cable logging refers to skyline logging. (See Skyline Logging)

Canopy – The uppermost layer consisting of the crowns of trees or shrubs in a forest or woodland.

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- Canopy Closure** – The degree to which the canopy (forest layers above ones' head) blocks the sunlight or obscures the sky. It can only be accurately determined from measurements taken under the canopy as openings in the branches and crowns must be accounted for.
- Channel** – An open conduit either naturally or artificially created which periodically or continuously contains moving water or forms a connecting link between two bodies of water.
- Char** – Burned slightly or partly, scorched.
- Climax** – The culminating stage in plant succession for a given site where vegetation has reached a highly stable condition.
- Closed Road** – A road or segment which is restricted from certain types of use during certain seasons of the year. The prohibited use and the time period of closure is specified.
- Colluvial** – Pertaining to material or processes associated with transportation and/or deposition by mass movement (direct gravitational action) and local, unconcentrated runoff on side slopes and/or at the base of slopes.
- Commercial Thinning** – The removal of merchantable trees from an even-aged stand to encourage growth of the remaining trees.
- Communities at Risk** – Communities that have been identified as being at risk from wild fires. This designation is given by the State Forester.
- Connectivity** – A measure of the extent to which conditions between late-successional/old growth forest areas provide habitat for breeding, feeding, dispersal, and movement of late-successional/old growth-associated wildlife and fish species.
- Core Area** – That area of habitat essential in the breeding, nesting, and rearing of Northern Spotted Owl young up to the point of dispersal of the young.
- Critical Habitat** – An area occupied by a threatened or endangered species “on which are found those physical and biological features (1) essential to the conservation of the species, and (2) which may require special management considerations or protection.”
- Cumulative Impact** – The impact on the environment that results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.
- Consultation** - A process where Federal agencies confer with USFWS or NOAA Fisheries to determine if proposed actions are in compliance with the Endangered Species Act.
- Debris Torrent** – Sudden and rapid down slope movement of unconsolidated rock fragments, soil, and mud in a steep confined channel, primarily caused by saturation from heavy rains.
- Density Management** – Cutting of trees for the primary purpose of widening the spacing so that growth of remaining trees can be accelerated. It can also be used to improve forest health, to open the forest canopy, or to accelerate the attainment of old-growth characteristics if maintenance or restoration of biological diversity is the objective.
- Early Seral Stage** – See Seral Stages
- Ecosystem** – A complete, interacting system of living organisms and the land and water that make up their environment; the home places of all living things, including humans.
- Endangered Species** – A plant or animal species whose prospects for survival and reproduction are in immediate jeopardy, as designated by the Secretary of the Interior, and as is further defined by the Endangered Species Act.

Endangered Species Act – A law passed in 1973 to conserve species of wildlife and plants determined by the Director of the US Fish and Wildlife Service (USFWS) or the National Oceanic and Atmospheric Administration–Fisheries (NOAA–Fish) to be endangered or threatened with extinction in all or a significant portion of its range.

Environmental Impact Statement – A statement of the environmental effect of a proposed action and alternatives to it.

Epiphytic – Growing on the surface of plants.

Erosion – The wearing away of the land surface by running water, wind, ice, or other geological agents.

Evapotranspiration – The process by which plants gain and lose moisture through their leaves.

Federal Register - A daily publication which reports Presidential and Federal Agency documents.

Fire Brand – Any ember, or flaming or smoldering material generated by vegetation as it burns. These airborne materials are capable of traveling long distances and igniting new fires.

Fire-Killed Tree – A tree with no apparent sign of green foliage.

Fire Risk – The chance of fire starting as determined by the presence and activity of causative agents.

Forb – An herbaceous plant that is not a grass, sedge, or rush.

Fragile Soils – A soil that is especially vulnerable to erosion or deterioration due to its physical characteristics and/or location. Disturbance to the surface or the vegetative cover can initiate a rapid style of loss and destruction of soil material, structure, and ability to sustain a biotic community.

Free Running Crown Fire – A fire that burns in the canopy independent of ground fire.

Fuel Loading – Fuel property for predicting whether a fire will ignite, its rate of spread and the intensity at which it will burn.

Fuel Models – Collection of various components of vegetation, live and dead, which are used to estimate fire behavior potential. Each fuel model is described by the fuel load, the depth of the fuel bed involved in the fire front and fuel moisture, including that at which fire will not spread.

Geographic Information System – A computer system capable of storing, analyzing, and displaying data and describing places on the earth's surface.

Ground Truthed – To verify at a physical location what is depicted or implied on a map or drawing.

Habitat – A specific set of physical conditions that surround a species, group of species, or a large community. In wildlife management, the major constituents of habitat are considered to be food, water, cover, and living space.

Hazard – A fuel complex defined by kind, arrangement, volume, condition, and location that forms a special threat of ignition and resistance to control.

Hazardous Fuels – Excessive live or dead wildland fuel accumulations that increase the potential for uncharacteristically intense wildland fire and decrease the capability to protect life, property, and natural resources.

High Severity Burn – See Burn Severity

Historic – Period wherein nonnative cultural activities took place, based primarily upon European roots, having no origin in the traditional Native American culture(s).

Hydrophobic – Wildfires burn dead and living vegetation that accumulates on the surface of the soil. This burning produces volatile, water repellent substances which can penetrate the soil up to a depth of six inches. When these substances penetrate the cool soil, they condense and coat the soil particles making the soil water repellent.

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Hydrophobic soils – Soils that are water repellent, often due to dense fungal mycelial mats or hydrophobic substances vaporized and reprecipitated during fire

Hypha (pl *hyphae*) – a threadlike fungal cell; the basic structural unit of any mushroom.

Impacts (or Effects) – Environmental consequences (the scientific and analytical basis for comparison of alternatives) as a result of a proposed action. Effects may be either direct, which are caused by the action and occur at the same time and place, or indirect, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable, or cumulative.

Intensity - A relative term used to describe fire behavior which can be translated to vegetation damage.

Interdisciplinary Team – A group of individuals with different training, representing the physical sciences, social sciences, and environmental design areas, assembled to solve a problem or perform a task. The members of the team proceed to a solution with frequent interaction so that each discipline may provide insights to any stage of the problem and disciplines may combine to provide new solutions. The number and disciplines of the members preparing the plan vary with circumstances. A member may represent one or more disciplines or Bureau program interests.

Ladder Fuels – Vertical continuity of fuels which influence flame length, and the ability of a fire to torch or potentially develop into a crown fire.

Large persistent deep seated slides - slow moving rotational, block, or complex movement of soil and rock material.

Late Seral Stage – See Seral Stages.

Late-Successional Reserve – A forest in its mature and/or old growth stages that has been reserved.

Litter – The uppermost layer of organic debris on the soil surface, essentially the freshly fallen or slightly decomposed vegetal material.

Low Severity Burn – See Burn Severity.

Mass Wasting – The collective term for all gravitational or down slope movement of weathered rock debris. Mass wasting consists of landslides and slumps, debris flows, and rock falls.

Matrix – Federal land outside of reserves, withdrawn area, managed Late-Successional areas and Adaptive Managements areas that will be available for timber harvest at varying levels.

Mesic - Of, characterized by, or adapted to a moderately moist habitat.

Mid-Seral Stage – See Seral Stages.

Mitigation Measures – Methods or procedures that reduce or lessen the impacts of an action.

Moderate Severity Burn – See Burn Severity.

Monitoring – the periodic observation and orderly collection of data on 1) changing conditions of public land related to management action and 2) the effects of implementing decisions.

Mycelium (pl *mycelia*) – A complex network of hyphae; the vegetative portion of a fungus.

Mychorrizal – A mutually beneficial symbiotic association of plant roots and fungi.

National Environmental Policy Act (NEPA) – An act passed in 1969 to declare a National policy that encourages productive and enjoyable harmony between humankind and the environment, promotes efforts that prevent or eliminate damage to the environment and biosphere, stimulates the health and welfare of humanity, enriches the understanding of the ecological systems and natural resources important to the nation, and established a Council of Environmental Quality.

- Neotropical Migratory Birds** – Birds that travel to Central America, South America, the Caribbean, and Mexico during the fall to spend the winter and then return to the United States and Canada during the spring to breed. These birds include almost half of the bird species that breed in the United States and Canada.
- Northwest Forest Plan 1994 (NFP)** – Coordinated ecosystem management direction incorporated into land management plans for lands administered by the Bureau of Land Management and the U.S. Forest Service within the range of the northern spotted owl.
- Noxious Weeds** – A plant species designated by Federal or State law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or nonnative, new, or not common to the United States.
- O&C Lands** – Public lands granted to the Oregon and California Railroad Company and subsequently reverted to the United States.
- Old-Growth** – Forested stands meeting, or with the capability to meet, the following criteria; at least 40 contiguous acres; contain mature trees with at least 15 trees per acre greater than 20 inches in diameter; a multilayered canopy with two or more age classes; contains snags and down woody material; contains understory plants.
- Overstory** – The layer of foliage in a forest canopy.
- Over-topped** – Surpassed, refers to vegetation that rises above the top of adjacent vegetation.
- Paleo-Indians** – One of the early American hunting people.
- Perennial Stream** – A stream that flows continuously during all seasons of the year.
- Physiographic Province** – A region defined by a unified geologic history and a characteristic geologic structure and climate that differs from adjoining regions.
- Planning Area** – Geographical areas for which land use and resource management plans are developed and maintained.
- Plant Series** – A major stratification of habitat named after the dominant climax plant species.
- Prehistoric** – Refers to the period wherein Native American Cultural activities took place which were not yet influenced by contact with historic nonnative culture(s).
- Prescribed Fire** – A fire burning under specified conditions that will accomplish certain planned objectives.
- Primary Constituent Elements** - Environmental factors USFWS has determined are essential to a species' conservation. For the spotted owl, they are the physical and biological features that support nesting, roosting, foraging, and dispersal (USDI, USFWS 1992).
- Probable Sale Quantity** – The estimate of the allowable harvest levels for the various alternatives.
- Record of Decision** – A document signed by a responsible official recording a decision that was preceded by the preparing of an environmental impact statement.
- Resource Management Plan 1994 (RMP)** – A land use plan prepared by the BLM under current regulations in accordance with the Federal Land Policy and Management Act (FLPMA).
- Riparian Area** – A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water.
- Riparian Reserves** – Areas along all streams, wetlands, ponds, lakes and unstable and potentially unstable areas where riparian-dependent resources receive primary emphasis. Riparian Reserves are important to the terrestrial ecosystem as well, serving, for example, as dispersal habitat for certain terrestrial species. This is a land allocation from the Northwest Forest Plan.

Risk – The probability that potential harm or undesirable consequences will be realized.

Rural Interface – Areas where BLM-administered lands are adjacent to or intermingled with privately owned lands zoned for 1 or 20 acres lots that already have residential development.

Salmonid – Any fish of the Salmonidae family, including salmon and trout.

Salvage – The harvest of fire-killed trees

Sclerophyll Brush – These species are drought tolerant and have a waxy, oily coating on the leaves which slows evapotranspiration, but raises flammability.

Scoping – The process of identifying the range of issues, management concerns, preliminary alternatives, and other components of an environmental impact statement or land-use planning document. It involves both internal and public viewpoints.

Sediment – Soil, rock particles and organic or other debris carried from one place to another by wind, water, or gravity.

Seral – Pertaining to the successional stages of biotic communities.

Seral Stages – The series of relatively transitory plant communities that develop during ecological succession from bare ground to the climax stage. There are three stages:

Early Seral Stage – The period from disturbance to the time when crowns close and conifers or hardwoods dominate the site. Under the current forest management regime, the duration is approximately 0 to 30 years. This stage may be dominated by grasses and forbs or by sprouting brush or hardwoods. Conifers develop slowly at first and gradually replace grasses, forbs, or brush as the dominant vegetation. Forage may be present; hiding or thermal cover may not be present except in rapidly sprouting brush communities.

Mid-Seral Stage – The period of time from crown closure to the time when conifers begin to die from competition; approximately 30 to 80 years. Stands are dense and dominated by conifers, hardwoods, or dense brush. Grass, forbs, and herbaceous vegetation decrease. Hiding cover for big game is usually present.

Late Seral Stage – The period of time when conifers begin to die from competition to the time when stand growth slows; generally over 80 years. Forest stands are dominated by conifers or hardwoods; canopy closure often approaches 100 percent. Stand diversity is minimal; conifer mortality rates and snag formation are rapid. Big game hiding and thermal cover is present. Forage and understory vegetation is minimal except in understocked stands or in meadow inclusions.

Severity – A term used in this document to describe amount of soil damage.

Shallow rapid slides – Mass movements on the underlying bedrock, generally shallow and composed of soil and decomposed rock. They are also referred to as debris avalanches.

Site Tenacity – The spotted owls tendency to return to the old activity center.

Skyline Logging – A logging system used to remove timber from steep slopes. Logs are brought up-slope on a suspended cable or skyline. Since the weight of the log is completely or partially supported by the cable, there is little disturbance to soil or other vegetation.

Snag – Any standing dead, partially-dead, or defective tree at least 10 inches in diameter at breast height and at least 6 feet tall.

Soil Compaction – An increase in bulk density (weight per unit volume) and a decrease in soil porosity resulting from applied loads, vibration, or pressure.

- Soil Organic Matter** – The total of the organic compounds in soil exclusive of undecayed plant and animal tissues, their “partial decomposition” products, and the soil biomass. This term is often used synonymously with **humus**.
- Soil Productivity** – The capacity of a soil to produce a certain yield of crops or other plants with a specified system of management.
- Special Status Species** – Includes proposed species, listed species, and candidate species under the ESA; State-listed species; and BLM State Director-designated sensitive species (see BLM Manual 640 – Special Status Species Policy).
- Stand-Replacement Fire** – A fire which kills all or most of the living overstory trees in a forest and initiates forest succession or regrowth.
- Stream Order** – A hydrologic system of stream classification based on stream branching. Each small unbranched tributary is a first order stream. Two first order streams join to make a second order stream. Two second order streams join to form a third order stream and so forth.
- Substrate** – The particles on the streambed, both organic and inorganic.
- Substrate (plants)** – Any object or material on which an organism grows or is attached.
- Survey and Manage Species** – Species that are closely associated with late-successional or old-growth forests whose long-term persistence is a concern. Various levels of surveys are completed and management actions taken to maintain the habitat elements needed to provide for persistence of the species at known sites. (a list of species identified in Survey & Manage Supplemental EIS)
- Survey Protocols** – These are interagency documents describing the survey techniques needed to have a reasonable chance of locating the species when it is present on the site, or needed to make an “equivalent-effort” of locating the species when it is present on the site.
- Symbiotic** – A close association of two animal or plant species that are dependent on one another.
- Thallus** (pl *thalli*) – The vegetative body of lichen.
- Threatened Species** – Any plant or animal species defined under the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range; listings are published in the *Federal Register*.
- Time Lag Fuels** – These fuels are used as the standard to measure changes in fuel moisture. Time lag refers to the time required for the moisture content of these fuels to change substantially.
- Unburned or Very Low Severity Burn** – See Burn Severity.
- Understory** – The trees and other woody species growing under the canopies of larger adjacent trees and other woody growth.
- Uplands** – Lands at higher elevations than alluvial plains or low stream terraces; all lands outside the riparian-wetland and aquatic zones.
- Watershed** – All lands which are enclosed by a continuous hydrologic drainage divide and lie upslope from a specified point on a stream.
- Weir** – A row of large boulders and/or trees that are tightly interlocked together that span a channel with the objectives of creating pool habitat and trapping substrate to form gravel beds.
- Wildland Urban-Interface (WUI)** – The area where forestland meets and transitions into residences.

